

L8 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1995:347076 BIOSIS
DN PREV199598361376
TI The effect of a probiotic on faecal and liver lipid classes in rats.
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Hokkaido 080 Japan
SO British Journal of Nutrition, (1995) Vol. 73, No. 5, pp. 701-710.
ISSN: 0007-1145.
DT Article
LA English
AB The effect of a probiotic composed of **Bacillus**, **Lactobacillus**,
Streptococcus, **Saccharomyces** and **Candida** species (each at 10⁷-8
colony-forming units (cfu)/g rice bran), given at a level of 150 g/kg
diet
for 6 weeks, on lipid metabolism was examined in the faeces, serum and
liver of male rats. Liver weight decreased 35% in the rats fed on a
high-fat, high-**cholesterol** diet containing the probiotic. Total
cholesterol concentration in the serum was significantly lower in
the probiotic group than in the control group throughout the experimental
period in rats fed on the high-fat, high-**cholesterol** diet, and
HDL-cholesterol concentration was significantly higher
(P < 0.05) in the probiotic group than in the control group which was
fed
for the 6 week experimental period on a basal diet. The serum VLDL + IDL
+
LDL **cholesterol** concentrations in the probiotic groups were
reduced compared with those of the corresponding control groups. The
probiotic groups fed on the high-fat, high-**cholesterol** diet and
the basal diet had lower hepatic **cholesterol** concentrations than
did the corresponding control groups (P < 0.05). Hydroxymethylglutaryl
coenzyme A reductase (NADPH) (EC 1.1.1.34) activity in the liver was
lower
in rats fed on the high-fat, high-**cholesterol** diet with the
probiotic. The neutral and acidic steroid concentrations in faeces were
higher in the probiotic group than in the control group fed on the
high-fat, high-**cholesterol** diet. Escherichia coli decreased and
Bifidobacterium and Eubacterium increased in the faecal microflora of
rats
fed on the dietary probiotic. Lactobacillus in the probiotic groups was
higher than that in the control groups. The present study shows that the
probiotic promotes Bifidobacterium and Eubacterium in the faecal
microflora, and reduces **cholesterol** levels in the serum and
liver of rats.

(FILE 'HOME' ENTERED AT 07:25:06 ON 05 SEP 2001)

FILE 'BIOSIS' ENTERED AT 07:25:15 ON 05 SEP 2001

L1 64237 S BACILLUS
L2 56 S SPOROLACTOBACILLUS
L3 143 S (L1 OR L2) AND ?CHOLESTEROL?
L4 106 S (L1 OR L2) (S) ?CHOLESTEROL?
L5 4 S L2 AND P44
L6 11 S L1 AND LAEVOLACTICUS

FILE 'STNGUIDE' ENTERED AT 07:28:37 ON 05 SEP 2001

L7 0 S L3 AND HDL

FILE 'BIOSIS' ENTERED AT 07:36:57 ON 05 SEP 2001

L8 3 S L3 AND HDL

FILE 'STNGUIDE' ENTERED AT 07:39:48 ON 05 SEP 2001

L9 0 S CHOLIC ACID

FILE 'BIOSIS' ENTERED AT 07:43:03 ON 05 SEP 2001

L10 4258 S CHOLIC ACID
L11 1336 S L10 AND ?CHOLESTEROL?
L12 467 S (CALCIUM CITRATE) OR (POTASSIUM GLUCONATE) OR (MAGNESIUM
CITR
L13 2 S L12 AND ?CHOLESTEROL?
L14 1276 S L10 (L) ?CHOLESTEROL?
L15 1063 S L10 (S) ?CHOLESTEROL?
L16 78 S L14 AND HDL
L17 73 S L10 (L) ?CHOLESTEROL? (L) HDL

FILE 'STNGUIDE' ENTERED AT 07:51:35 ON 05 SEP 2001

FILE 'BIOSIS' ENTERED AT 07:53:52 ON 05 SEP 2001

L18 25 S (INCREASE OR IMPROVE) (L) HDL (L) ?CHOLESTEROL? (L) (CHOLIC
A

FILE 'STNGUIDE' ENTERED AT 07:58:19 ON 05 SEP 2001

FILE 'BIOSIS' ENTERED AT 08:10:18 ON 05 SEP 2001

L19 0 S CHOLIC ACID SEQUESTERING AGENT
L20 0 S CHOLIC ACID COMPLEXATION AGENT
L21 88 S CHOLIC ACID (S) (COMPLEX? OR SEQUESTER?)
L22 2 S L21 (L) ?CHOLESTEROL? (L) HDL

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metal with salt with (clacium or potassium or magnesium or chromium) with 17

10

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Database: IBM Technical Disclosure Bulletins[Refine Search:](#)metal with salt with (clacium or
potassium or magnesium or chromium) with
17[Clear](#)**Search History****Today's Date:** 9/5/2001

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USPT,PGPB,JPAB,EPAB,DWPI	metal with salt with (clacium or potassium or magnesium or chromium) with 17	10	<u>L15</u>
USPT,PGPB,JPAB,EPAB,DWPI	17 with (potassium near2 salt)	15	<u>L14</u>
USPT,PGPB,JPAB,EPAB,DWPI	17 with (potassium with salt)	28	<u>L13</u>
USPT,PGPB,JPAB,EPAB,DWPI	17 same (potassium with salt)	45	<u>L12</u>
USPT,PGPB,JPAB,EPAB,DWPI	17 and (potassium)	924	<u>L11</u>
USPT,PGPB,JPAB,EPAB,DWPI	17 and (potassium near gluconate)	0	<u>L10</u>
USPT,PGPB,JPAB,EPAB,DWPI	17 and (calcium near citrate)	10	<u>L9</u>
USPT,PGPB,JPAB,EPAB,DWPI	17 same (calcium near citrate)	2	<u>L8</u>
USPT,PGPB,JPAB,EPAB,DWPI	cholic near acid	2035	<u>L7</u>
USPT,PGPB,JPAB,EPAB,DWPI	((complexation or sequester\$3) with cholic)	5	<u>L6</u>
USPT,PGPB,JPAB,EPAB,DWPI	((complexation or sequestering) with cholic)	0	<u>L5</u>
USPT,PGPB,JPAB,EPAB,DWPI	((complex\$5 or sequester\$3) with cholic) and (metal with salt)	10	<u>L4</u>
USPT,PGPB,JPAB,EPAB,DWPI	(complex\$5 or sequester\$3) with cholic	42	<u>L3</u>
USPT,PGPB,JPAB,EPAB,DWPI	(cholic near acid) same (bile near acid) same cholesterol	89	<u>L2</u>
USPT,PGPB,JPAB,EPAB,DWPI	(Cholic near acid) same (bile near acid)	388	<u>L1</u>